

REMARKS

Claims 1-10, 13-17, 20-29, 31-38, 41 and 42 are currently pending in the subject application and are presently under consideration. Claims 1, 2, 3, 6, 26, 31 and 38 have been amended as shown on pages 2-8 of the Reply. Claims 11, 12, 18, 19, 30, 39, and 40 have been cancelled. Applicants' representative notes with appreciation the indication that claims 30 and 31 would be allowable if recast in independent form to include all limitations of respective base claims and any intervening claims. Accordingly, independent claims 1, 26, and 38 have been amended to recite the allowable subject matter. Additionally, applicants' representative thanks Examiner Nguyen for courtesies extended during the interview conducted on January 22, 2007. It was agreed that the amended claims overcome existing rejections.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claim 39 Under 35 U.S.C §112

Claim 39 stands rejected under 35 U.S.C §112, first paragraph, as failing to comply with the enablement requirement. Claim 39 is cancelled. Accordingly, it is requested that this rejection be withdrawn.

II. Rejection of Claims 1, 3, 6, 11 and 39 Under 35 U.S.C §112

Claims 1, 3, 6, 11 and 39 stand rejected under 35 U.S.C. §112, second paragraph. Withdrawal of this rejection is requested for the following reasons. Claims 1, 3, 6 and 11 have been amended to cure minor informalities. Claim 39 is cancelled. Accordingly, it is requested that this rejection be withdrawn.

III. Rejection of Claims 1-3, 4, 6, 7, 9-14, 16-20, 22-34 and 38-39 Under 35 U.S.C. §101

Claims 1-3, 4, 6, 7, 9-14, 16-20, 22-34 and 38-39 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. This rejection should be withdrawn for at least the following reasons. The invention as recited in the claims is directed towards statutory subject matter that produces useful, concrete results and is embodied in at least one computer readable medium.

The Examiner in rejecting the claims contends that, "No physical transformation is

claimed. It is unclear as to what kind of tangible output is obtained.” (See Office Action dated November 1, 2006, page 3). Applicants’ representative respectively disagrees. The subject claims 1-3, 4, 6, 7, 9-14, 16-20, 22-34 and 38-39 pertain to software code comprising a component that receives user specified input data and a generation component that automatically generates a conditioning variable for a data perspective. The fact that the components are software components (*e.g.*, that they are not “physical things”) is irrelevant to the fact that applicants’ claimed invention relates to a system for creating objects that are incorporated into computer programs. Pursuant to *Eolas v. Microsoft*, software code alone qualifies as an invention eligible for patenting.

This court must also decide whether software code made in the United States and exported abroad is a "component of a patented invention" under 271(f)... Section 271(f) refers to "components of a patented invention."... Title 35, section 101, explains that an invention [*1339] includes "any new and useful process, machine, manufacture or composition of matter."... ***Without question, software code alone qualifies as an invention eligible for patenting*** under these categories, at least as processes. *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338-39 (Fed. Cir. 2005) (emphasis added).

Further, independent claims 1, 26, and 38 have been amended herein to clearly illustrate that elements within such claims are associated with a computer. In particular, claim 1 as amended is directed towards a ***computer implemented*** system, comprising the following ***computer executable components***, wherein such components perform a function (*e.g.*, automatic generation of data perspectives based on user-specified inputs). Accordingly, this claim includes functional descriptive material within a computer; thereby rendering it structurally and functionally interrelated to the computer and is therefore directed to statutory subject matter. Claims 26 and 38 have been similarly amended.

Because the claimed process applies the Boolean principle [abstract idea] ***to produce a useful, concrete, tangible result*** ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank &*

Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998).

Additionally, it is readily apparent that these claims, as well as independent claim 1, recite independent acts to produce a useful, tangible, and concrete result. The claimed subject matter generally relates to data mining with components tangibly embodied in at least a computer readable medium and methods executable at least in part by computing devices, provide for automatic generation of data perspectives based on user-specified inputs. This allows for construction of data perspectives such as, for example, pivot tables *and/or* OLAP cube viewers on a computing device from user-desired parameters and a database. By providing automatic data perspective generation, the claimed subject matter permits inexperienced users to glean or ‘data mine’ additional valuable information from the database. (See applicants’ specification page 3 lines 14-18). Accordingly, the system as recited in the independent claim 1 provides ***a conditioning variable for the generation of a data perspective***. Independent claims 26, 38 and claims that depend from them produce at least the aforementioned useful, concrete, and tangible results. Accordingly, this rejection should be withdrawn.

IV. **Rejection of Claims 1-6, 26, 27, 34-38, 40-42 Under 35 U.S.C. §102(e)**

Claims 1-6, 26, 27, 34-38, 40-42 stand rejected under 35 U.S.C. §102(e) as being anticipated by Chu, *et al.* (U.S. 2002/0099581). Withdrawal of this rejection is requested for at least the following reasons. The cited reference fails to teach or suggest all aspects set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it ***expressly or inherently describes each and every limitation set forth in the patent claim***. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The ***identical invention must be shown in as complete detail as is contained in the ... claim***. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

The claimed invention relates to systems and methods for providing automatic generation of data perspectives based on user-specified inputs. The system assists a user to automatically generate data perspectives from a database by selecting the data of interest and specifying a target variable. Machine learning techniques are leveraged to provide automatic generation of conditioning variables for a given target variable. To this end, amended independent claim 1 recites *the conditioning variable determined by employing a decision tree constructed utilizing the heuristic method of learning a single decision tree comprising the complete decision tree, converting the single decision tree into a set of predictor variables and corresponding values for the predictor variables; and searching over at least one sub-tree of the single decision tree to find at least one optimum set of predictor variables and their granularities*. Independent claims 26 and 38 recite similar features. Chu, *et al.* fails to teach or suggest such novel features recited in the subject claims. Chu, *et al.* teaches a computer implemented dimension engine that automatically identifies the market segments represented in user specified input data, but is silent regarding the conditioning variable generated utilizing a heuristic method recited by applicant's subject claims. Accordingly, it is requested that this rejection with respect to independent claims 1, 26 and 38 (and the claims that depend there from) should be withdrawn.

V. Rejection of Claims 7-11 Under 35 U.S.C. §103(a)

Claims 7-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chu, *et al.* in view of Stolte, *et al.* (U.S. 7,089,266). Withdrawal of this rejection is respectfully requested for at least the following reasons. Claims 7-11 depend from independent claim 1. As discussed supra, Chu, *et al.* fails to teach or suggest all limitations with respect to independent claim 1. Stolte, *et al.* relates to a system and method for producing graphics wherein a hierarchical system of databases is determined. However, it fails to compensate for the aforementioned deficiencies of Chu, *et al.* Accordingly, it is requested that this rejection should be withdrawn.

VI. Rejection of Claims 12-25, 28, 29, 32 and 33 Under 35 U.S.C. §103(a)

Claims 12-25, 28, 29, 32 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chu, *et al.* in view of Honarvar, *et al.* (U.S. 6,430,545). Withdrawal of this rejection is respectfully requested for at least the following reasons. Claims 12- 25, 28, 29, 32

and 33 depend from independent claims 1 and 26. As discussed supra, Chu, *et al.* fails to teach or suggest all limitations with respect to independent claims 1 and 26. Honarvar, *et al.* relates to a rules based decision management system using online analytical processing (OLAP) technology for dynamic assessment of strategy results. However, it fails to compensate for the aforementioned deficiencies of Chu, *et al.* Accordingly, it is requested that this rejection should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP617US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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